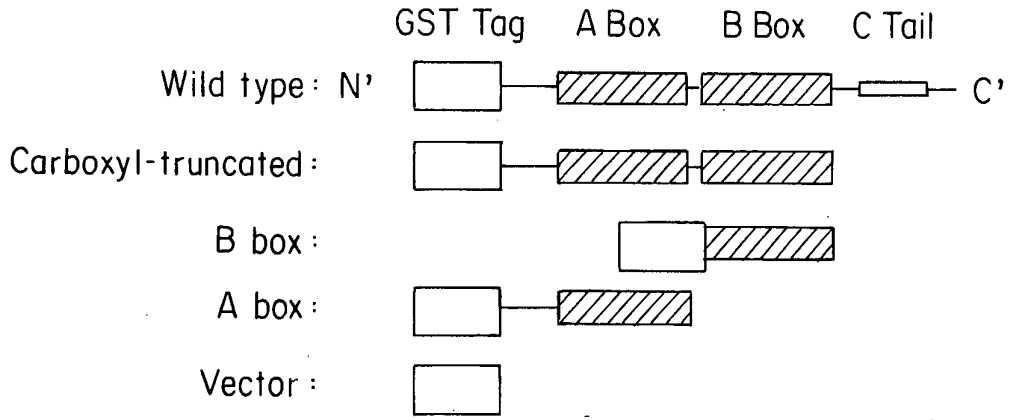
GST Tag
A Box
B Box
C Tail
TNF Release (pg/ml)
Wild type: N'
C'
7224±2083 *
Carboxyl-truncated:
3463±713 *
B box:
5675±575 *
A box:
1800±680
Vector:
178±141

FIG. 1

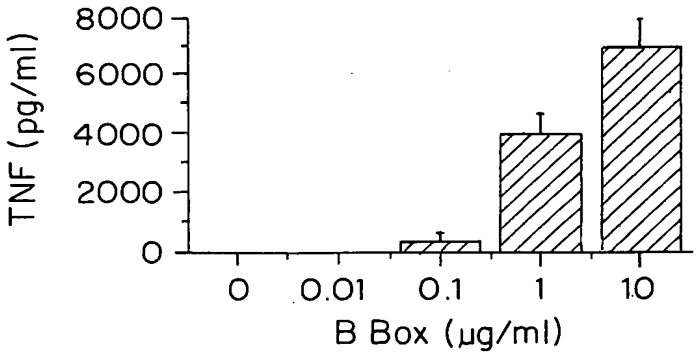

FIG. 2A

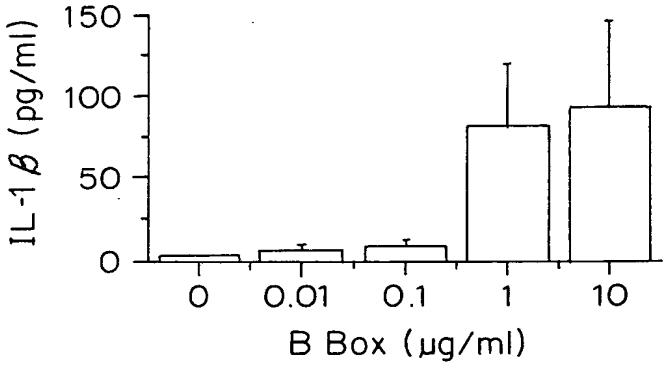

FIG. 2B

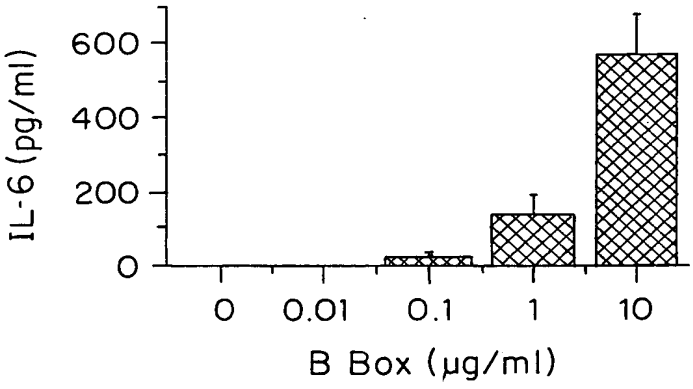

FIG. 2C

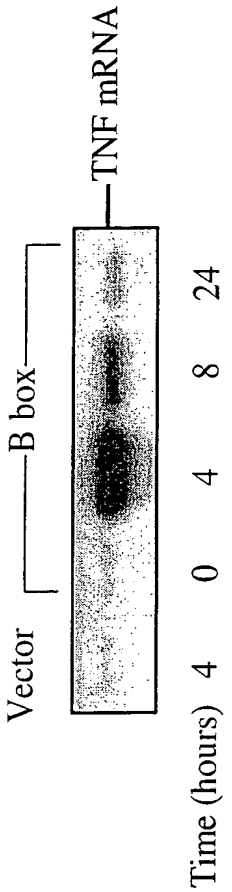

FIG. 2D

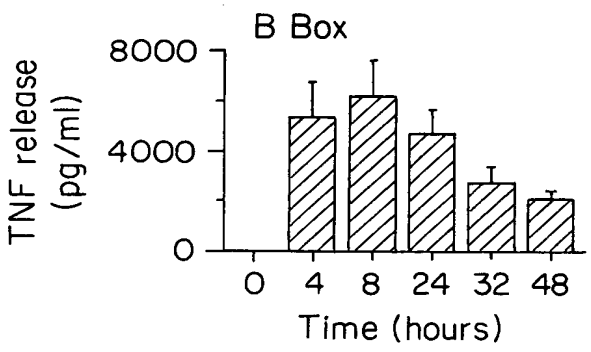

FIG. 2E

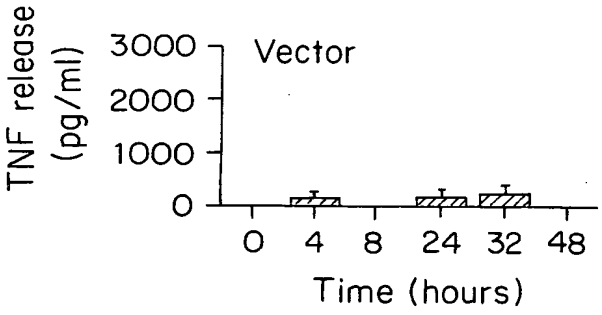

FIG. 2F

B box mutants	TNF release (pg/ml)
B box: 74 amino acids	5675±575
1-20	2100±756
16-35	100±10
30-49	120±75
45-64	100±36
60-74	100±20

FIG. 3

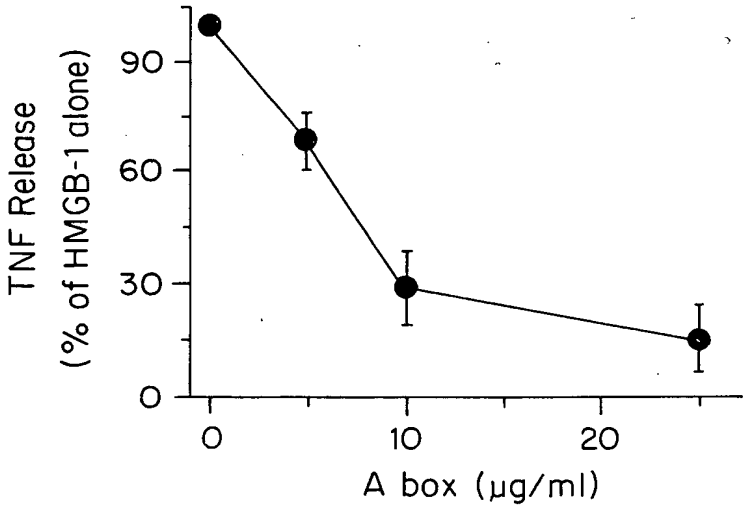
TNF Release
(% of HMGB-1 alone)
90
60
30
0
0
10
20
A box (μg/ml)

FIG. 4A

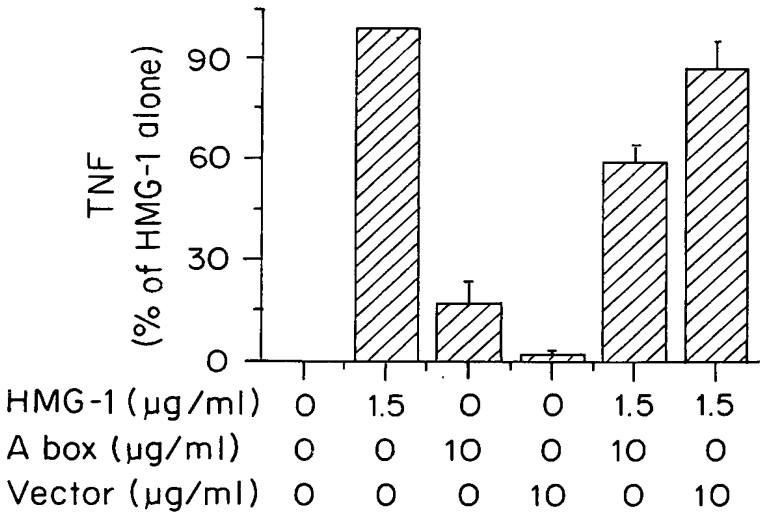
TNF
(% of HMG-1 alone)
90
60
30
0
HMG-1 (μg/ml) 0 1.5 0 0 1.5 1.5
A box (μg/ml) 0 0 10 0 10 0
Vector (μg/ml) 0 0 0 10 0 10

FIG. 4B

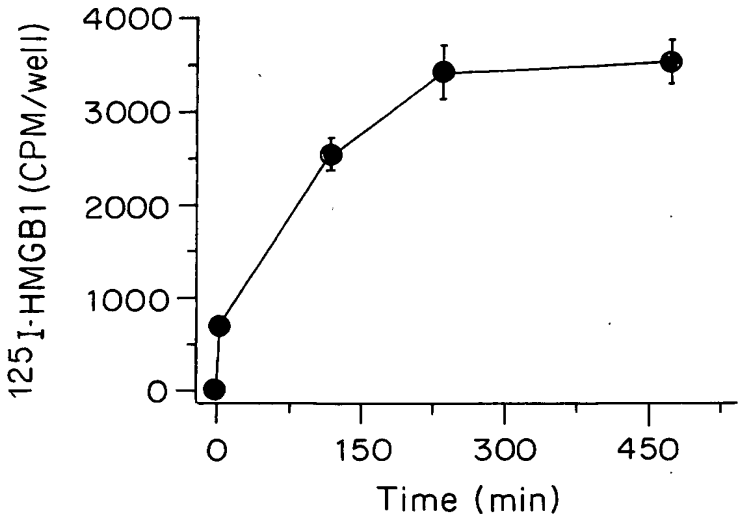

FIG. 5A

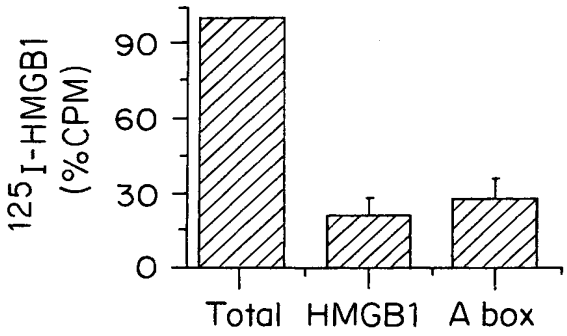

FIG. 5B

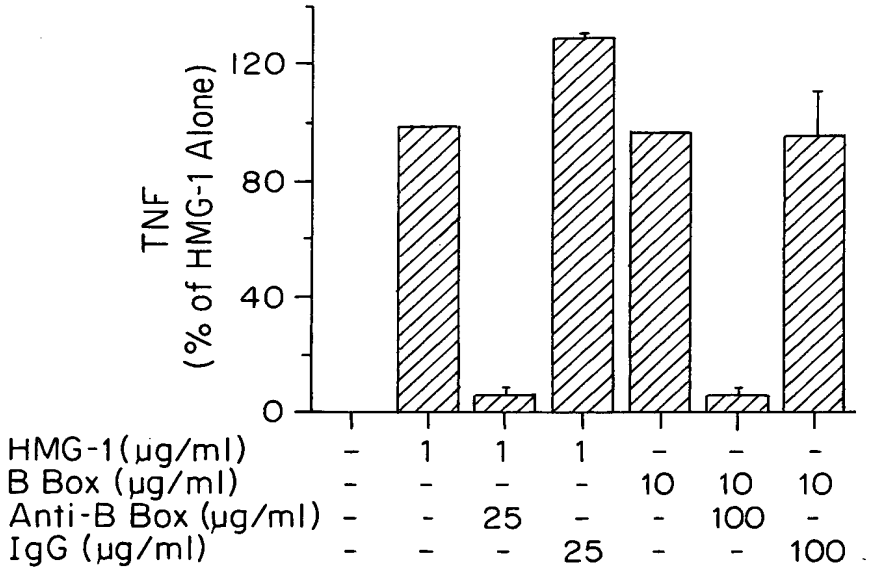

FIG. 6

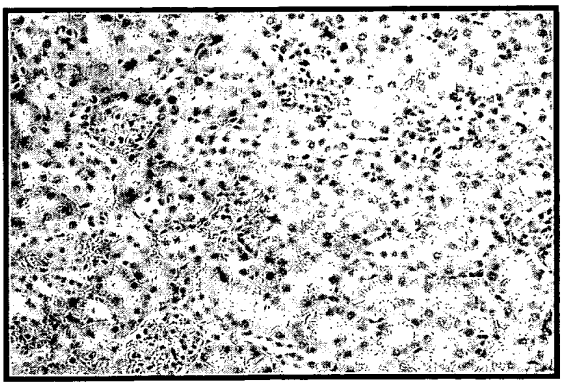

FIG. 7A

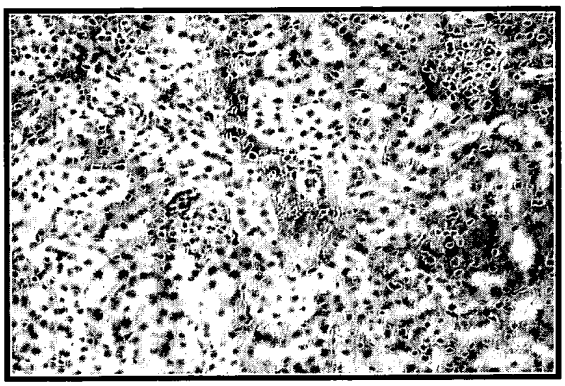

FIG. 7B

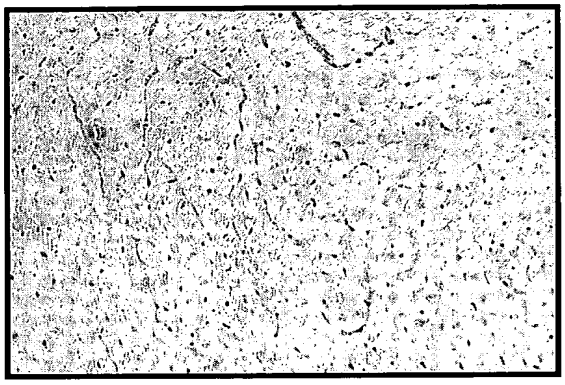

FIG. 7C

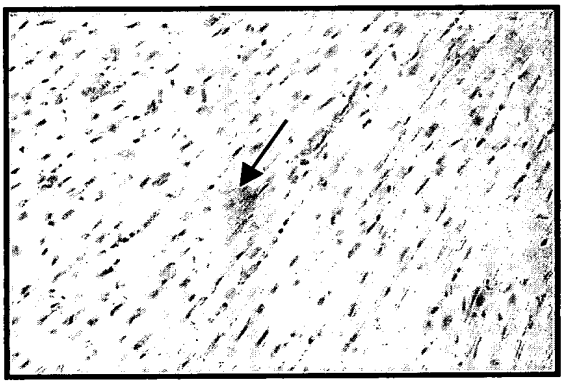

FIG. 7D

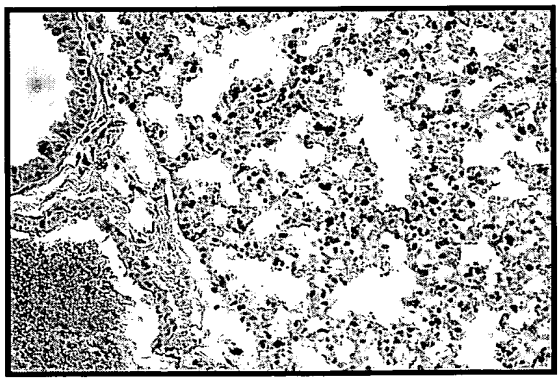

FIG. 7E

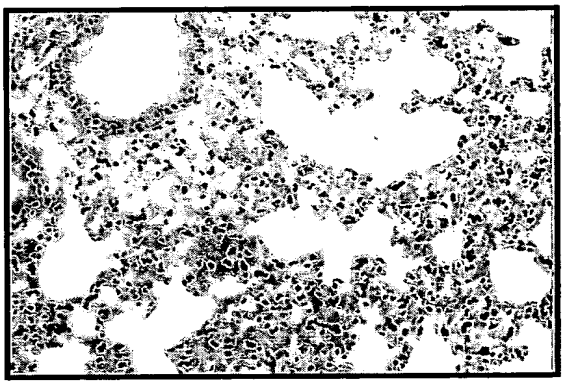

FIG. 7F

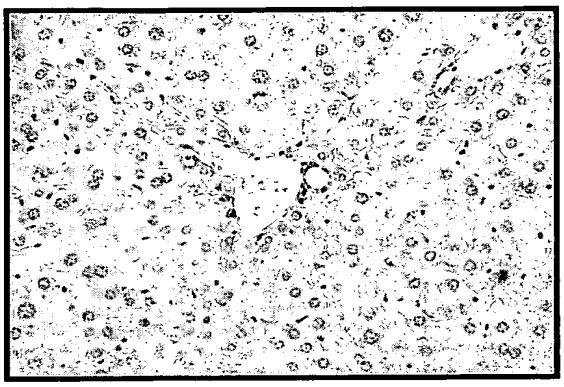

FIG. 7G

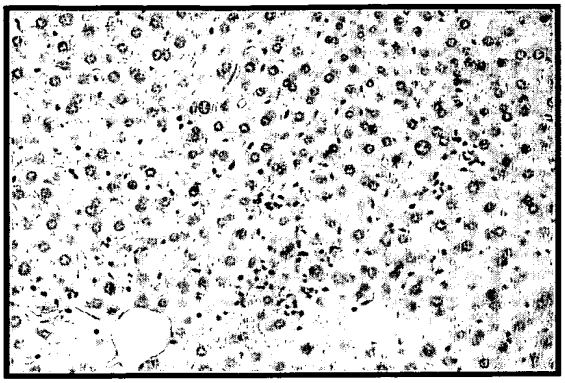

FIG. 7H

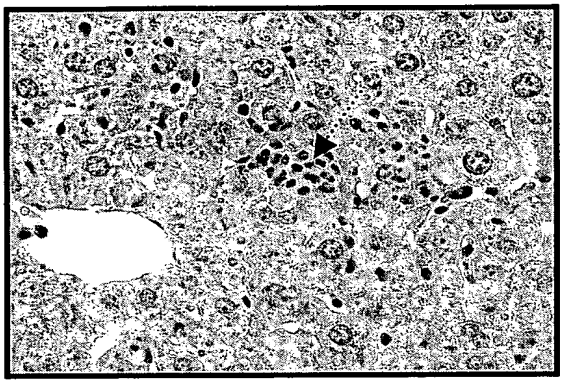

FIG. 7I

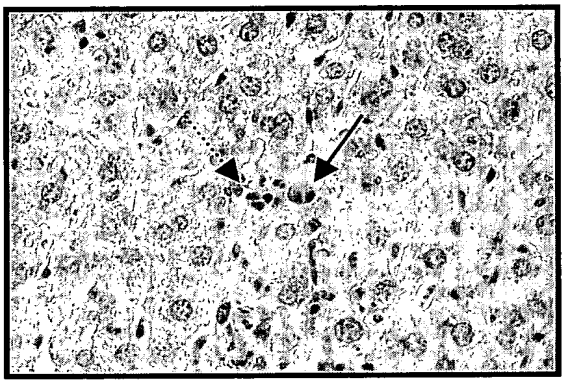

FIG. 7J

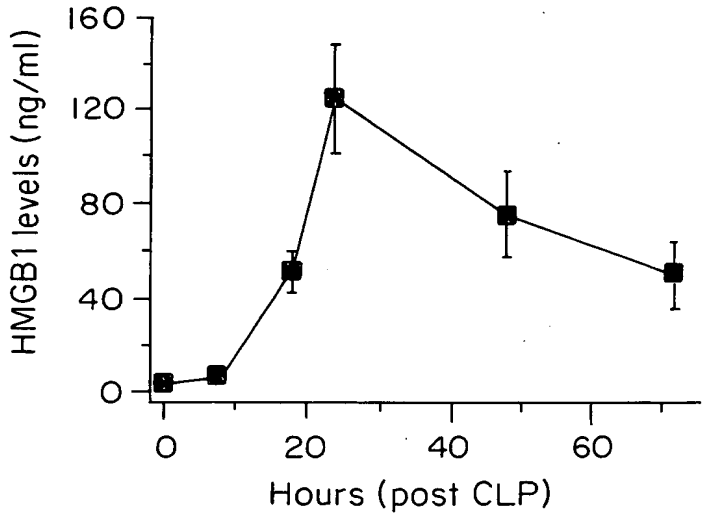
HMGB1 levels (ng/ml)
160
120
80
40
0
0
20
40
60
Hours (post CLP)

FIG. 8

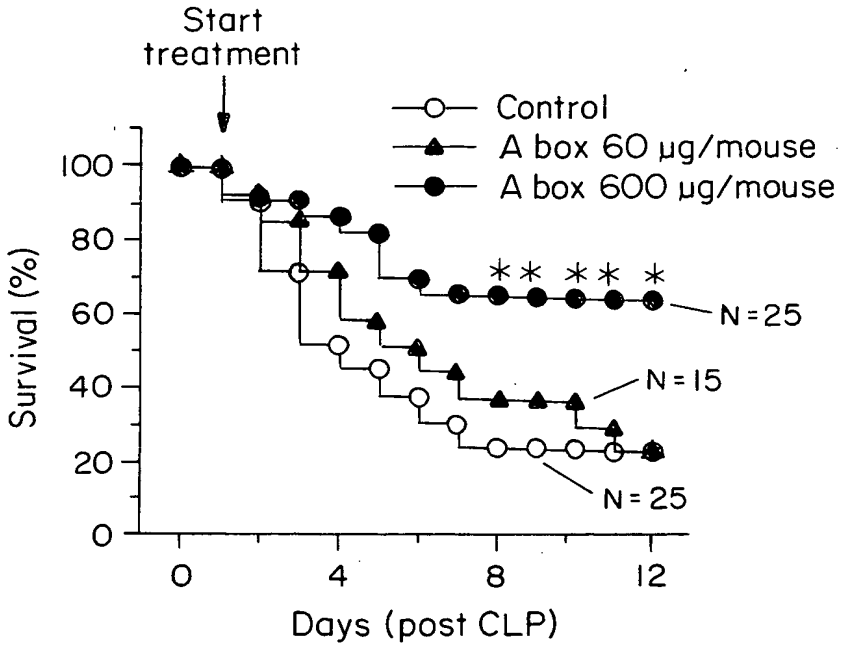
Start
treatment
Control
A box 60 µg/mouse
A box 600 µg/mouse
Survival (%)
100
80
60
40
20
0
* * * * *
N = 25
N = 15
N = 25
0
4
8
12
Days (post CLP)

FIG. 9

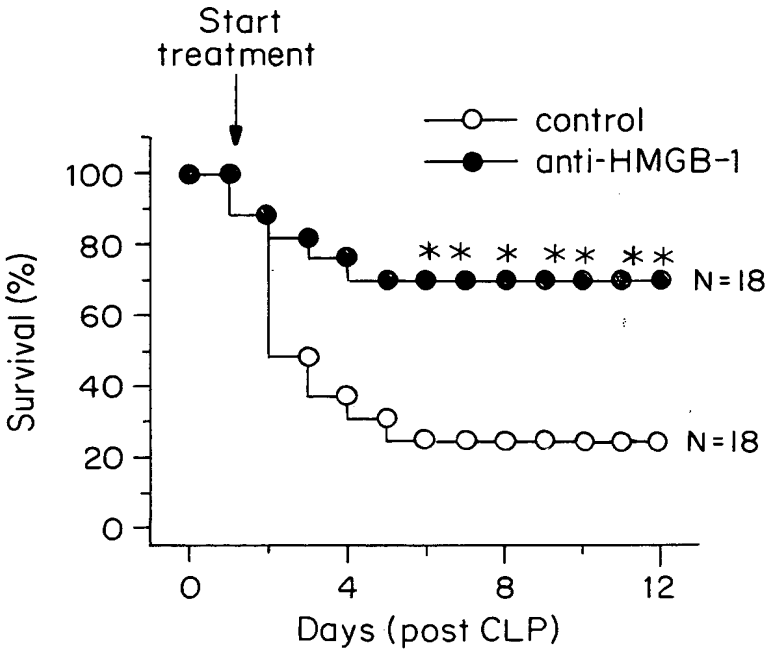

FIG. 10A

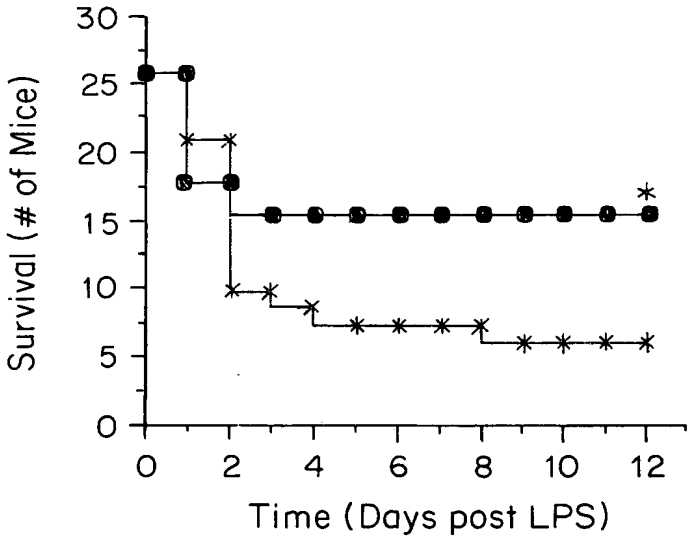

FIG. 10B

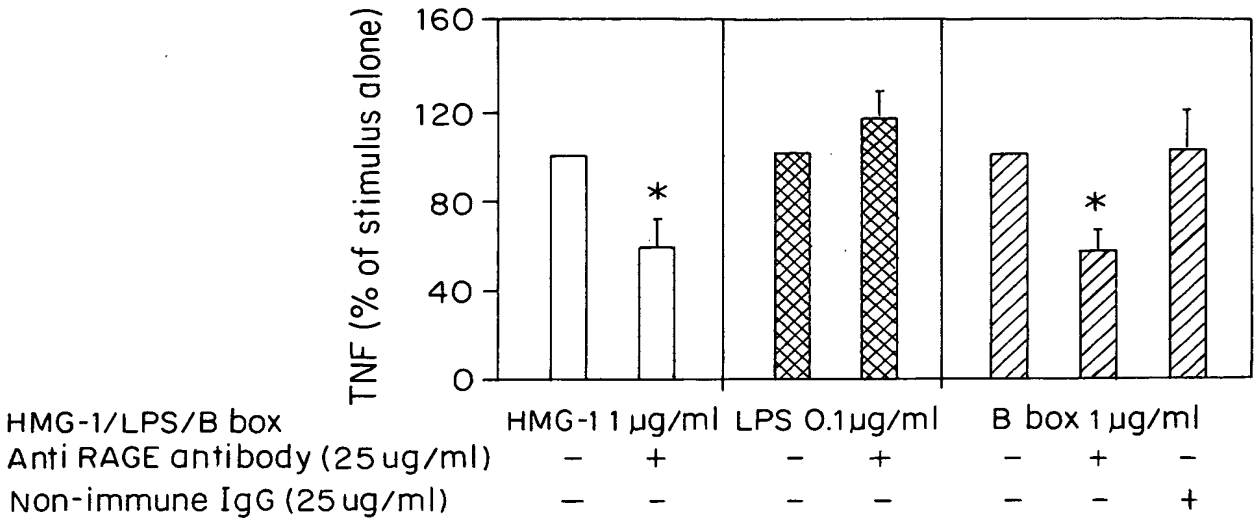

FIG. 11A

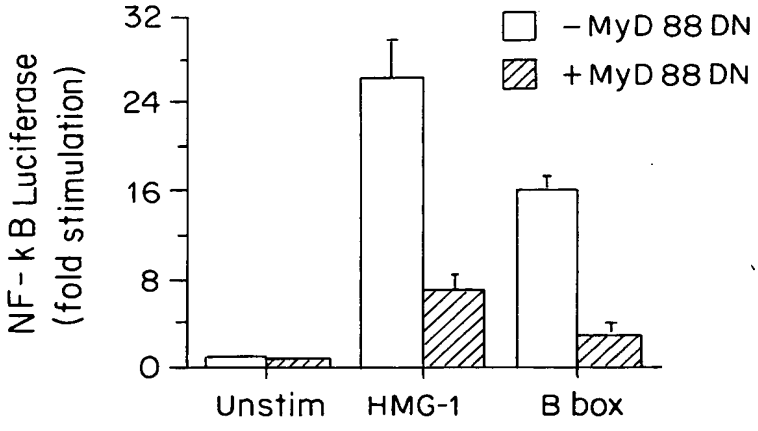

FIG. 11B

FIG. 12A
SEQ ID NO:1 - Human HMG1 amino acid sequence
1 mgkgdpkkpr gkmssyaffv qtcreehkkk hpdasvnfse fskkcserwk tmsakekgkf
61 edmakadkar yeremktyip pkgetkkkfk dpnapkrpps afflfcseyr pkikgehpgl
121 sigdvakklg emwnntaadd kqpyekkaak lkekyekdia ayrakgkpda akkgvvkaek
181 skkkkeeeed eedeedeeee edeededeee dddde

FIG. 12B
SEQ ID NO:2 - Mouse and Rat HMG1 amino acid sequence
1 mgkgdpkkpr gkmssyaffv qtcreehkkk hpdasvnfse fskkcserwk tmsakekgkf
61 edmakadkar yeremktyip pkgetkkkfk dpnapkrpps afflfcseyr pkikgehpgl
121 sigdvakklg emwnntaadd kqpyekkaak lkekyekdia ayrakgkpda akkgvvkaek
181 skkkkeeedd eedeedeeee eeeededeee dddde

FIG. 12C
SEQ ID NO:3 - HUMAN HMG2 amino acid sequence
1 mgkgdpnkpr gkmssyaffv qtcreehkkk hpdssvnfae fskkcserwk tmsakekskf
61 edmaksdkar ydremknyvp pkgdkkgkkk dpnapkrpps afflfcsehr pkiksehpgl
121 sigdtakklg emwseqsakd kqpyeqkaak lkekyekdia ayrakgksea gkkgpgrptg
181 skkknepede eeeeeeeded eeeededee

FIG. 12D
SEQ ID NO:4 - Human, mouse and rat HMG1 A box protein sequence
1 pdasvnfsef skkcserwkt msakekgkfe dmakadkary eremktyipp kget

FIG. 12E
SEQ ID NO:5 - Human, mouse and rat HMG1 B box protein sequence
1 napkrppsaf flfcseyrpk ikgehpglsi gdvakklgem wnntaaddkq pyekkaaklk
61 ekyekdiaa

FIG. 12F
SEQ ID NO:6 - forward PCR primer for human HMG1
gatgggcaaaggagatcctaag.

FIG. 12G
SEQ ID NO:7 - reverse PCR primer for human HMG1
gcggccgcttattcatcatcatcatcttc

FIG. 12H
SEQ ID NO:8 - forward PCR primer for -C mutant of human HMG1
gatgggcaaaggagatcctaag

FIG. 12I
SEQ ID NO:9 - reverse PCR primer for -C mutant of human HMG1
gcggccgctcacttgctttttcagccttgac

FIG. 12J
SEQ ID NO:10 - forward PCR primer for A+B boxes mutant of human HMG1
gagcataagaagaagcaccca

FIG. 12K
SEQ ID NO:11 - reverse PCR primer for A+B boxes mutant of human HMG1
gcggccgc tcacttgctttttcagccttgac

FIG. 12L
SEQ ID NO:12 - forward PCR primer for B box mutant of human HMG1
aagttcaaggatcccaatgcaaag

FIG. 12M
SEQ ID NO:13 - reverse PCR primer for B box mutant of human HMG1
gcggccgctcaatatgcagctatatccttttc

FIG. 12N
SEQ ID NO:14 - forward PCR primer for N'+A box mutant of human HMG1
gatgggcaaaggagatcctaag

FIG. 12O
SEQ ID NO:15 - reverse PCR primer for N'+A box mutant of human HMG1
tcacttttttgtctccccttgggg

1 mgkgdpkkpr gkmssyaffv qtcreehkkk hpdasvnfse fskkcserwk tmsakekgkf *rat #P07155*
1 mgkgdpkkpr gkmssyaffv qtcreehkkk hpdasvnfse fskkcserwk tmsakekgkf *mouse #AAA20508*
1 mgkgdpkkpt gkmssyaffv qtcreehkkk hpdasvnfse fskkcserwk tmsakekgkf *human #AAA64970*
A box

61 edmakadkar yeremktyip pkgetkkkfk dpnapkrpps afflfcseyr pkikgehpgl *rat*
61 edmakadkar yeremktyip pkgetkkkfk dpnapkrpps afflfcseyr pkikgehpgl *mouse*
61 edmakadkar yeremktyip pkgetkkkfk dpnapkrips afflfcseyr pkikgehpgl *human*
B box

121 sigdvakklg emwnntaadd kqpyekkaak lkekyekdia ayrakgkpda akkgvvkaek *rat*
121 sigdvakklg emwnntaadd kqpyekkaak lkekyekdia ayrakgkpda akkgvvkaek *mouse*
121 sigdvakklg emwnntaadd kqpyekkaak lkekyekdia ayrakgkpda akkgvvkaek *human*

181 skkkkeeedd eedeedeeee eeeede deee dddde *rat*
181 skkkkeeedd eedeedeeee eeeede deee dddde *mouse*
181 skkkkeeeed eedeedeeee edeedeedeee dddde *human*

FIG. 13

FIG. 14A
NG_000897 DNA (bases 150-797)

ATGGGCAAAG GAGATCCTAA GAAGCCGACA GGCAAAATGT CATCATATGC
ATTTTTTGTG CAAACTTGTC GGGAGGAGCA TAAGAAGAAG CACCCAGATG
CTTCAGTCAA CTTCTCAGAG TTTTCTAAGA AGTGCTCAGA GAGGTGGAAG
ACCATGTCTG CTAAAGAGAA AGGAAAATTT GAAGATATGG CAAAGGCGGA
CAAGGCCCGT TATGAAAGAG AAATGAAAAC CTATATCCCT CCCAAAGGGG
AGACAAAAAA GAAGTTCAAG GATCCCAATG CACCCAAGAG GCTTCCTTCG
GCCTTCTTCC TCTTCTGCTC TGAGTATCGC CCAAAAATCA AAGGAGAACA
TCCTGGCCTG TCCATTGGTG ATGTTGCGAA GAAACTGGGA GAGATGTGGA
ATAACACTGC TGCAGATGAC AAGCAGCCTT ATGAAAAGAA GGCTGCGAAG
CTGAAGGAAA AATACGAAAA GGATATAGCT GCATATCGAG CTAAAGGAAA
GCCTGATGCA GCAAAAAAGG GAGTTGTCAA GGCTGAAAAA AGCAAGAAAA
AGAAGGAAGA GGAGGAAGAT GAGGAAGATG AAGAGGATGA GGAGGAGGAG
GAAGATGAAG AAGATGAAGA AGATGAAGAA GAAGATGATG ATGATGAA

FIG. 14B
NG_000897 Protein

MGKGDPKKPT GKMSSYAFFV QTCREEHKKK HPDASVNFSE FSKKCSERWK
TMSAKEKGKF EDMAKADKAR YEREMKTYIP PKGETKKKFK DPNAPKRLPS
AFFLFCSEYR PKIKGEHPGL SIGDVAKKLG EMWNNTAADD KQPYEKKAAK
LKEKYEKDIA AYRAKGKPDA AKKGVVKAEK SKKKKEEEED EEDEEDEEEE
EDEEDEEDEE EDDDDE

FIG. 14C
AF076674 DNA (bases 1-633)

ATGGGCAAAG GAGATCCTAA GAAGCCGAGA GGCAAAATGT CATCATATGC
ATTTTTTGTG CAAACTTGTC GGGAGGAGCA TAAGAAGAAG CACTCAGATG
CTTCAGTCAA CTTCTCAGAG TTTTCTAACA AGTGCTCAGA GAGGTGGAAG
ACCATGTCTG CTAAAGAGAA AGGAAAATTT GAGGATATGG CAAAGGCGGA
CAAGACCCAT TATGAAAGAC AAATGAAAAC CTATATCCCT CCCAAAGGGG
AGACAAAAAA GAAGTTCAAG GATCCCAATG CACCCAAGAG GCCTCCTTCG
GCCTTCTTCC TGTTCTGCTC TGAGTATCAC CCAAAAATCA AAGGAGAACA
TCCTGGCCTG TCCATTGGTG ATGTTGCGAA GAAACTGGGA GAGATGTGGA
ATAACACTGC TGCAGATGAC AAGCAGCCTG GTGAAAAGAA GGCTGCGAAG
CTGAAGGAAA AATACGAAAA GGATATTGCT GCATATCAAG CTAAAGGAAA
GCCTGAGGCA GCAAAAAAGG GAGTTGTCAA AGCTGAAAAA AGCAAGAAAA
AGAAGGAAGA GGAGGAAGAT GAGGAAGATG AAGAGGATGA GGAGGAGGAA
GATGAAGAAG ATGAAGAAGA TGATGATGAT GAA

FIG. 14D
AF076674 Protein

MGKGDPKKPR GKMSSYAFFV QTCREEHKKK HSDASVNFSE FSNKCSERWK
TMSAKEKGKF EDMAKADKTH YERQMKTYIP PKGETKKKFK DPNAPKRPPS
AFFLFCSEYH PKIKGEHPGL SIGDVAKKLG EMWNNTAADD KQPGEKKAAK
LKEKYEKDIA AYQAKGKPEA AKKGVVKAEK SKKKKEEEED EEDEEDEEEE
DEEDEEDDDD E

FIG. 14E
AF076676 DNA (bases 1-564)

ATGGGCAAAG GAGACCCTAA GAAGCCGAGA GGCAAAATGT CATCATATGC
ATTTTTTGTG CAAACTTGTC GGGAGGAGTG TAAGAAGAAG CACCCAGATG
CTTCAGTCAA CTTCTCAGAG TTTTCTAAGA AGTGCTCAGA GAGGTGGAAG
GCCATGTCTG CTAAAGATAA AGGAAAATTT GAAGATATGG CAAAGGTGGA
CAAAGACCGT TATGAAAGAG AAATGAAAAC CTATATCCCT CCTAAAGGGG
AGACAAAAAA GAAGTTCGAG GATTCCAATG CACCCAAGAG GCCTCCTTCG
GCCTTTTTGC TGTTCTGCTC TGAGTATTGC CCAAAAATCA AAGGAGAGCA
TCCTGGCCTG CCTATTAGCG ATGTTGCAAA GAAACTGGTA GAGATGTGGA
ATAACACTTT TGCAGATGAC AAGCAGCTTT GTGAAAAGAA GGCTGCAAAG
CTGAAGGAAA AATACAAAAA GGATACAGCT ACATATCGAG CTAAAGGAAA
GCCTGATGCA GCAAAAAAGG GAGTTGTCAA GGCTGAAAAA AGCAAGAAAA
AGAAGGAAGA GGAG

FIG. 14F
AF076676 Protein

MGKGDPKKPR GKMSSYAFFV QTCREECKKK HPDASVNFSE FSKKCSERWK
AMSAKDKGKF EDMAKVDKDR YEREMKTYIP PKGETKKKFE DSNAPKRPPS
AFLLFCSEYC PKIKGEHPGL PISDVAKKLV EMWNNTFADD KQLCEKKAAK
LKEKYKKDTA TYRAKGKPDA AKKGVVKAEK SKKKKEEE

FIG. 14G
AC010149 DNA (bases 75503-76117)

ATGGACAAAG CAGATCCTAA GAAGCTGAGA GGTGAAATGT TATCATATGC
ATTTTTTGTG CAAACTTGTC AGGAGGAGCA TAAGAAGAAG AACCCAGATG
CTTCAGTCAA GTTCTCAGAG TTTTTAAAGA AGTGCTCAGA GACATGGAAG
ACCATTTTTG CTAAAGAGAA AGGAAAATTT GAAGATATGG CAAAGGCGGA
CAAGGCCCAT TATGAAAGAG AAATGAAAAC CTATATCCCT CCTAAAGGGG
AGAAAAAAAA GAAGTTCAAG GATCCCAATG CACCCAAGAG GCCTCCTTTG
GCCTTTTTCC TGTTCTGCTC TGAGTATCGC CCAAAAATCA AAGGAGAACA
TCCTGGCCTG TCCATTGATG ATGTTGTGAA GAAACTGGCA GGGATGTGGA
ATAACACCGC TGCAGCTGAC AAGCAGTTTT ATGAAAAGAA GGCTGCAAAG
CTGAAGGAAA AATACAAAAA GGATATTGCT GCATATCGAG CTAAAGGAAA
GCCTAATTCA GCAAAAAAGA GAGTTGTCAA GGCTGAAAAA AGCAAGAAAA
AGAAGGAAGA GGAAGAAGAT GAAGAGGATG AACAAGAGGA GGAAAATGAA
GAAGATGATG ATAAA

FIG. 14H
AC010149 Protein

MDKADPKKLR GEMLSYAFFV QTCQEEHKKK NPDASVKFSE FLKKCSETWK
TIFAKEKGKF EDMAKADKAH YEREMKTYIP PKGEKKKKFK DPNAPKRPPL
AFFLFCSEYR PKIKGEHPGL SIDDVVKKLA GMWNNTAAAD KQFYEKKAAK
LKEKYKKDIA AYRAKGKPNS AKKRVVKAEK SKKKKEEEED EEDEQEEENE
EDDDK

FIG. 14I
AF165168 DNA (bases 729-968)

ATGGGCAAAG GAGATCCTAA GAAGCCGAGA GGCAAAATGT CATCATGTGC
ATTTTTTGTG CAAACTTGTT GGGAGGAGCA TAAGAAGCAG TACCCAGATG
CTTCAATCAA CTTCTCAGAG TTTTCTCAGA AGTGCCCAGA GACGTGGAAG
ACCACGATTG CTAAAGAGAA AGGAAAATTT GAAGATATGC CAAAGGCAGA
CAAGGCCCAT TATGAAAGAG AAATGAAAAC CTATATACCC

FIG. 14J
AF165168 Protein

MGKGDPKKPR GKMSSCAFFV QTCWEEHKKQ YPDASINFSE FSQKCPETWK
TTIAKEKGKF EDMPKADKAH YEREMKTYIP

FIG. 14K
XM_063129 DNA (bases 319-558)

AAACAGAGAG GCAAAATGCC ATCGTATGTA TTTTGTGTGC AAACTTGTCC
GGAGGAGCGT AAGAAGAAAC ACCCAGATGC TTCAGTCAAC TTCTCAGAGT
TTTCTAAGAA GTGCTTAGTG AGGGGGAAGA CCATGTCTGC TAAAGAGAAA
GGACAATTTG AAGCTATGGC AAGGGCAGAC AAGGCCCGTT ACGAAAGAGA
AATGAAAACA TATATCCCTC CTAAAGGGGA GACAAAAAAA

FIG. 14L
XM_063129 Protein

KQRGKMPSYV FCVQTCPEER KKKHPDASVN FSEFSKKCLV RGKTMSAKEK
GQFEAMARAD KARYEREMKT YIPPKGETKK

FIG. 14M
XM_066789 DNA (bases 1-258)

ATGGGCAAAA GAGACCCTAA GCAGCCAAGA GGCAAAATGT CATCATATGC
ATTTTTTGTG CAAACTGCTC AGGAGGAGCA CAAGAAGAAA CAACTAGATG
CTTCAGTCAG TTTCTCAGAG TTTTCTAAGA ACTGCTCAGA GAGGTGGAAG
ACCATGTCTG TTAAAGAGAA AGGAAAATTT GAAGACATGG CAAAGGCAGA
CAAGGCCTGT TATGAAAGAG AAATGAAAAT ATATCCCTAC TTAAAGGGGA
GACAAAAA

FIG. 14N
XM_066789 Protein

MGKRDPKQPR GKMSSYAFFV QTAQEEHKKK QLDASVSFSE FSKNCSERWK
TMSVKEKGKF EDMAKADKAC YEREMKIYPY LKGRQK

FIG. 14O
AF165167 DNA (bases 456-666)
ATGGGCAAAG GAGACCCTAA GAAGCCAAGA GAGAAAATGC CATCATATGC
ATTTTTTGTG CAAACTTGTA GGGAGGCACA TAAGAACAAA CATCCAGATG
CTTCAGTCAA CTCCTCAGAG TTTTCTAAGA AGTGCTCAGA GAGGTGGAAG
ACCATGCCTA CTAAACAGAA AGGAAAATTC GAAGATATGG CAAAGGCAGA
CAGGGCCCAT A

FIG. 14P
AF165167 Protein
MGKGDPKKPR EKMPSYAFFV QTCREAHKNK HPDASVNSSE FSKKCSERWK
TMPTKQKGKF EDMAKADRAH